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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,375	12/18/2001	Robert V. M. Oerlemans	750039.401	4796

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EXAMINER	
AUVE, GLENN ALLEN	

ART UNIT	PAPER NUMBER
2111	

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,375	OERLEMANS ET AL.	
	Examiner	Art Unit	
	Glenn A. Auve	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-40 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-40 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 18 December 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/18/2002.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities: in the last line "being" should be "is" or "are". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14 and 18-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 is rejected because it is not clear what is meant by "according to any of the claims 1" on line 1.

Claim 18 is rejected based on lack of positive antecedent basis of "said first and the second data means" on lines 5-6.

Claims 19-27 are rejected because they depend on claim 18.

Claim 19 is also rejected based on lack of positive antecedent basis of "said transaction" on line 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-12,14-17, and 28-40 are rejected under 35 U.S.C. 102(b) as being anticipated by "Secure Smart Card Reader Chip PCC807" brochure (hereinafter PCC807) cited by applicant.

As per claim 1, PCC807 shows a data transfer device (the PCC807 chip), having first data interface means (UART connected to the serial interface) for exchanging data with a data processing system, second data interface means (bottom of the figure interfaces) for exchanging data with a user of said data transfer device, and control means (processor 8051 and the various modules on the right side of the drawing coupled to the processor) for controlling data transfer between said first and second data interface means wherein said control means are configured for receiving control data from said first data interface means for selectively enabling data exchange between said first and second data interface means (throughout the document, wherein data is exchanged between the computer device coupled to the serial interface and the user via the smart card and other interfaces at the bottom of the figure). The PCC807 shows all of the elements recited in claim 1.

As for claim 2, the argument for claim 1 applies. PCC807 also shows that said control means are configured for processing data provided by said first and second data interface means in accordance with said control data (throughout the document). The PCC807 shows all of the elements recited in claim 2.

As for claim 3, the argument for claim 1 applies. PCC807 also shows that said control means are configured for processing data provided by said first and second data interface in accordance with program execution data to be executed by said data processing system, wherein said program execution data being comprised by said control data (throughout the document). The PCC807 shows all of the elements recited in claim 3.

As for claim 4, the argument for claim 1 applies. PCC807 also shows that said control means are configured for enabling part of said first and second data interface means for operation in an open mode (the general mode in the document). The PCC807 shows all of the elements recited in claim 4.

As for claim 5, the argument for claim 1 applies. PCC807 also shows that said control means are configured for enabling said second data interface means for operation in a secure mode (PCC807 describes such a secure mode). The PCC807 shows all of the elements recited in claim 5.

As for claim 6, the argument for claim 1 applies. PCC807 also shows that said control means are configured for enabling said second data interface means for operation in a secure mode and for executing program execution data if said data transfer device is set in a secure mode of operation (second page, "secure mode" description). The PCC807 shows all of the elements recited in claim 6.

As for claim 7, the argument for claim 1 applies. PCC807 also shows data storage means for storing authentication data, wherein said control means are configured for providing an authentication check on received control data for setting said data transfer device in either one of an open and secure mode of operation (throughout the document, and in the figure "Authenticated Download"). The PCC807 shows all of the elements recited in claim 7.

As for claim 8, the argument for claim 1 applies. PCC807 also shows data storage means for storing certificate data, wherein said control data comprise certificate data, and said control data means are configured for checking said certificate data of said control data with respect to certificate data stored in said data storage means, for setting said data transfer device in a secure mode of operation if said certificate data of said control data are approved and for setting said data transfer device in an open mode of operation for either one of

disapproval of said certificate data and non-availability of certificate data of said control data, and for deleting said control data if said certificate data thereof are false (throughout the document). The PCC807 shows all of the elements recited in claim 8.

As for claim 9, the argument for claim 1 applies. PCC807 also shows that said control means are configured for enabling part of said first and second data interface means for operation in an open mode, and wherein said control means are configured for enabling said second data interface means for operation in a secure mode, said second data interface comprises keypad means, data card reader means and display means, said control means in said open mode are configured for enabling access to said data card reader means, and said control means in said secure mode are configured for enabling access to said keypad means, data card reader means and display means (throughout the document). The PCC807 shows all of the elements recited in claim 9.

As for claim 10, the argument for claim 9 applies. PCC807 also shows that said control means are configured for processing data provided by said card reader means in accordance with said control data received (throughout the document). The PCC807 shows all of the elements recited in claim 10.

As for claim 11, the argument for claim 1 applies. PCC807 also shows that said control means are configured for enabling part of said first and second data interface means for operation in an open mode, and wherein said control means are configured for enabling said second data interface means for operation in a secure mode, wherein said second data interface comprises Input/Output (I/O) means for data exchange with at least one peripheral device to be connected to said I/O means, and wherein said control means in said secure mode are configured for enabling access to said I/O means by said at least one peripheral device (in

the figure and throughout the document). The PCC807 shows all of the elements recited in claim 11.

As for claim 12, the argument for claim 11 applies. PCC807 also shows that said I/O means are configured for connecting at least one data communication device (at least the LCD or keypad). The PCC807 shows all of the elements recited in claim 12.

As for claim 14, the argument for claim 1 applies. PCC807 also shows that said control means are configured for enabling part of said first and second data interface means for operation in an open mode, and wherein said control means are configured for enabling said second data interface means for operation in a secure mode, further comprising signaling means for signaling said mode of operation of said data transfer device (throughout the document). The PCC807 shows all of the elements recited in claim 14.

As for claim 15, the argument for claim 14 applies. PCC807 also shows that said signaling means comprise a Light Emitting Diode (LED), and said control means are arranged for illuminating said LED if said data transfer device is in its secure mode of operation (page 1 and in the figure, right hand side). The PCC807 shows all of the elements recited in claim 15.

As for claim 16, the argument for claim 1 applies. PCC807 also shows means for supporting encrypted data transfer via said first interface means (throughout the document). The PCC807 shows all of the elements recited in claim 16.

As for claim 17, the argument for claim 1 applies. PCC807 also shows that first data interface means comprise standardized computer data interface means, such as USB (Universal Serial Bus) interface means (second page, paragraph 1). The PCC807 shows all of the elements recited in claim 17.

As per claim 28, PCC807 shows method of exchanging data with a data processing system using a data transfer device having first data interface means for exchanging data with

said data processing system, second data interface means for exchanging data with a user of said data transfer device, and control means for controlling data transfer between said first and second data interface means, said method comprising the steps of: transferring control data from said data processing system to said data transfer device, and selectively enabling exchange of data between said first and second data interface means (throughout the document). The PCC807 shows all of the steps recited in claim 28.

As for claim 29, the argument for claim 28 applies. PCC807 also shows that an authentication check is performed by said control means on said control data for setting the data transfer device in either one of an open and secure mode of operation (throughout the document). The PCC807 shows all of the steps recited in claim 29.

As for claim 30, the argument for claim 29 applies. PCC807 also shows that said control data comprise certificate data, wherein said control data being checked by said control means with respect to said certificate data, and wherein said data transfer device is set in its secure mode of operation if said certificate data of said control data are approved and said data transfer device is set in its open mode of operation for either one of disapproval of said certificate data and non-availability of certificate data of said control data, said control data being deleted if said certificate data thereof are false (throughout the document). The PCC807 shows all of the steps recited in claim 30.

As for claim 31, the argument for claim 30 applies. PCC807 also shows that said data transfer device in its open mode of operation exchanges data with said second data interface means through a limited number of data input means thereof, including data card reader means, whereas the data transfer device in its secure mode of operation exchanges data with said second data interface means through a plurality of data input and output devices thereof, including keypad means, display means, card reader means, and Input/Output (I/O) means for

data exchange with at least one peripheral device to be connected to said I/O means (throughout the document). The PCC807 shows all of the steps recited in claim 31.

As for claim 33, the argument for claim 31 applies. PCC807 also shows that said I/O means are enabled and disabled under control of program execution data of a program executed by said data processing system, said program execution data being comprised by said control data (throughout the document). The PCC807 shows all of the steps recited in claim 33.

As for claim 34, the argument for claim 33 applies. PCC807 also shows that said program execution data are operative in said data transfer device while a data card operatively connects to said card reader means (throughout the document). The PCC807 shows all of the steps recited in claim 34.

As for claim 32, the argument for claim 30 applies. PCC807 also shows that data provided by said first and second data processing means are processed in accordance with program execution data of a program executed by said data processing system, said program execution data being comprised by said control data (throughout the document). The PCC807 shows all of the steps recited in claim 32.

As for claim 35, the argument for claim 30 applies. PCC807 also shows that data between said data processing system and said data transfer device are exchanged in an encrypted form (throughout the document). The PCC807 shows all of the steps recited in claim 35.

As for claim 36, the argument for claim 30 applies. PCC807 also shows that control data in said data transfer device are erased after the completion of a data exchange (throughout the document). The PCC807 shows all of the steps recited in claim 36.

As per claim 37, the PCC807 shows Application Specific Integrated Circuit (ASIC) device comprising data exchange means and control means for selectively enabling data

exchange between first and second data interface means based on control data in accordance with claim 1 (throughout the document). The PCC807 shows all of the elements recited in claim 37.

As for claim 38, the argument for claim 37 applies. PCC807 also shows at least one of said first and second data interface means (figure). The PCC807 shows all of the elements recited in claim 38.

As for claim 39, the argument for claim 37 applies. PCC807 also shows data processing means for processing data provided by said first and second data interface means in accordance with program execution data provided by said control data (processor). The PCC807 shows all of the elements recited in claim 39.

As for claim 40, the argument for claim 37 applies. PCC807 also shows data storage means, among others for storing said control data, said program execution data and authentication data (figure). The PCC807 shows all of the elements recited in claim 40.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 13 and 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCC807 (applied above) in view of Challener et al., U.S. Pat. No. 6,598,032 B1.

As for claim 13, the argument above for claim 11 applies. PCC807 does not specifically show that said I/O means are configured for connecting at least one Voice over IP (VoIP) digital telephone device. However, Challener shows a system coupling a smart card reader to a PC which is coupled to the internet. Among the services available over the internet is VoIP, and it therefore would have been obvious to one of ordinary skill in the art at the time of the invention to connect the system of the PCC807 to the internet as shown by Challener to use VoIP services in order to communicate over the internet.

As per claim 18, PCC807 shows a data transfer device (the PCC807) having first data interface means (serial interface) for exchanging data with a data processing system, second data interface means (interfaces at the bottom of the figure) for exchanging data with a user of said data transfer device, and control means (processor 8051 and affiliated modules) for controlling data transfer between said first and the second data means. The PCC807 does not specifically show a first processing device such as to be operated by an authorization entity, a second processing device such as to be operated by a user and wherein said first and second processing devices connect to a data network, said data transfer device with its first interface means connects to said second processing device, and said first and second processing devices being configured for exchanging control data from said first processing device to said data transfer device for selectively enabling said second data interface means of said data transfer device.

However Challener shows a first processing device such as to be operated by an authorization entity (server 205B), a second processing device (202) such as to be operated by a user and wherein said first and second processing devices connect to a data network (internet), said data transfer device with its first interface means connects to said second processing device, and said first and second processing devices being configured for exchanging control data from said first processing device to said data transfer device for selectively enabling said second data interface means of said data transfer device (figure 2, wherein the card reader apparatus is coupled to the second processing device 202 and the processing devices exchange control information for secure data transfer (throughout cols. 4-8). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the PCC807 in a system such as Challener's in order to allow secure operations between a smart card and a server on the internet for accessing all of the various systems and functions coupled to the internet.

As for claim 19, the argument for claim 18 applies. PCC807 also shows a transaction involves exchange of trusted data (throughout the document). Challener shows said first processing device is configured for providing control data for setting said data transfer device in a secure mode (cols. 5-6).

As for claim 20, the argument for claim 18 applies. Challener shows a third processing device such as to be operated by a transaction entity, wherein said third processing device connects to said data network (connected to the web server), and said first processing device being configured for enabling a transaction between said second and third processing devices dependent on said enabling of said second data interface means of said data transfer device (cols. 5-6).

As for claim 21, the argument for claim 20 applies. Challener also shows that said transaction between said second and third processing devices involves exchange of trusted data between said first and second processing devices, wherein said first processing device is configured for providing control data for setting said data transfer device in a secure mode of operation and wherein said third processing device is configured for enabling said transaction between said second and third processing devices after said trusted data have been successfully exchanged (cols. 5-7).

As for claim 22, the argument for claim 20 applies. PCC807 also shows that said second data interface comprises Input/Output (I/O) means for data exchange with at least one peripheral device to be connected to said I/O means (in the figure). Challener shows said transaction between said second and third processing devices involves exchange of trusted data between said first and second processing devices, said first processing device being configured for providing control data for setting said data transfer device in a secure mode of operation and said third processing device is configured for enabling a transaction between said I/O means and said third processing device after said trusted data have been successfully exchanged (cols. 5-7).

As for claim 23, the argument for claim 20 applies. Challener also shows that said transaction entity is a telecommunication service provider (cols. 5-7, wherein the transaction can take place between the user and any site coupled to the internet that accepts payments which would include a telecommunication service provider).

As for claim 24, the argument for claim 20 applies. Challener also shows a plurality of first, second and third processing devices wherein said data network is a public data network, such as the Internet (fig.2 and cols. 5-7).

As for claim 27, the argument for claim 20 applies. Challener also shows a third processing device configured for operating in accordance with claim 20 (cols. 5-7).

As for claim 25, the argument for claim 18 applies. Challener shows a first processing device configured for operating in accordance with claim 18 (205b).

As for claim 26, the argument for claim 18 applies. Challener shows a second processing device configured for operating in accordance with claim 18 (202).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show smart card systems that operate in secure modes.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (703) 305-9638. The examiner can normally be reached on M-Th 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenn A. Auve
Primary Examiner
Art Unit 2111

gaa
May 14, 2004